

# Piracy Culture and File-Sharing<sup>1</sup>

## (Economic Approach; Online Market v. Physical Market)

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### Abstract

The utilization of Internet technology is widely practiced by the entire population of the globe, including Indonesia. The demand for fast and efficient information makes the Internet as a major public space. During its development, applied technology became a “double-edged sword”, in addition to the mankind welfare; it is used for unlawful acts. Copyright infringements on music, movies and software grow faster and take in a big range of spread in Indonesia specifically. An original and common violation becomes problematic to detect in this digital era. Illegal downloading, illegal uploading and file sharing became common activities among the citizenry. Government and related legislation was not able to follow the extreme advance of Internet technology. Consequently, legal enforcement is performed only among the spread of illegal contents and pirate products. Copyright industries face new growing problems with digital piracy; flash drivers, smartphones, tablets and other high mobile technologies. In some countries, these devices are preloaded with illegal content even before they are sold. Accompanied by government, they try to find the solutions to stop the physical and online piracy. One thing that have to fulfill by the government is copyright policy's ability has to regulate information flows and enforce its rules to not severely constrained in a distributed and decentralized network society.

### Keywords

copyright, illegal file sharing, enforcement

## 著作権侵害の文化やファイル共有 (経済学的アプローチ；オンライン市場対物理市場)

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### 要旨

インターネット技術の利用が広く、インドネシアを含む世界の全人口、によって実施されます。高速かつ効率的な情報に対する需要は、主要な公共空間としてのインターネットになります。その開発中に、適用される技術は「両刃の剣」になりました、人類の福祉に加えて、それは不法行為のために使用されます。音楽の著作権侵害は、映画やソフトウェアが速く成長し、特にインドネシアで広がり大きな範囲で取ります。オリジナルと共通の違反がこのデジタル時代に検出することが問題となります。違法ダウンロード違法アップロードとファイル共有が市民の間で共通

の活動となりました。政府と関連する法律は、インターネット技術の極端な進歩に追従することができませんでした。その結果、法的執行のみを違法コンテンツや海賊製品の普及の間で行われています。著作権産業は、デジタル著作権侵害で新しい成長の問題に直面しています。フラッシュドライブ、スマートフォン、タブレットおよびその他の高モバイル技術。いくつかの国で、これらのデバイスは、それらが販売される前であっても違法なコンテンツがプリロードされています。政府に伴い、彼らは物理的およびオンライン海賊行為を停止するためのソリューションを探してみてください。政府が満たさなければならないことの一つは、著作権ポリシーの能力は、情報の流れを調節し、深刻な分散型と分散型のネットワーク社会に拘束されない、そのルールを適用しなければならないです。

#### キーワード

著作権、違法なファイル共有、執行

## I. Introduction

Copyright comes up into a new level of digital revolution; Regulation process, object production and file distribution (file sharing) had a substantial alteration. Therefore, frequently encountered that there is a difference of interest between copyright protection and technological improvements. Today, by the Interconnection-Networking (Internet), infringement of copyright has lasted longer and grows bigger. Copyright works; songs, films, software programs, books and many more, are easy to reformed, duplicated, shared and be traded illegally. Net user that reach hundreds of millions people and spread all over the world arrives that activity extremely difficult to monitor and detect because of the borderless Internet itself. Hence, Governments are required to be able in creating a protection system for copyright holders on the Internet without losing a sense of justice for the Internet users.

In 2014, Indonesia remained on the Priority Watch List of copyright infringement by United States Trade Representative (USTR).<sup>2</sup> They reported that Indonesia addressed high level of Intellectual Property Right (IPR)

infringement. In fact, it takes places all over the world, developed and developing countries. One of the biggest issues in IPR infringement is Illegal file sharing and broadcast piracy on the Internet. USTR noted, there is online marketplace engaging in commercial-scale IPR infringement, including sited hosted operated by some parties located in China, Indonesia, Canada, United Kingdom, Netherland, Russia, and many more.<sup>3</sup>

## II. Technology v. Copyright Law

Technological advance and social changes brought global phenomena of copyright practices: from the types of technology utilization, freedom of copyrighted content access, and creation of Internet environment culture. Unfortunately, the legal changes did not much happen in the same way in the Indonesia, U.S and Japan.<sup>4</sup>

U.S. has a general doctrine of fair use to protect the areas of exemptions including private copyright,<sup>5</sup> and moreover judges have substantial discretion in analyzing the fair use principle. Instead, Japan has formulate of more specific statutory exemptions about private

use/private copying<sup>6</sup> and its application by the judges were relative rigid.<sup>7</sup> Private use or private copying in Japan ruled at Art. 30 Japanese Copyright Law, which exempts exploitation made by (1) the user, (2) for the purpose of his personal use, family use, or other similar uses within a limited circle, (3) automatic reproducing machines for the use of the public, and (4) reproduction is made by a person who knows that such reproduction becomes possible by the circumvention of technological measures, and private copying made on digital recording medium should be compensated for by a levy system.<sup>8</sup> On the other hand Indonesia is using both principles to give exemptions of copyrighted works, nonetheless very few cases resolved by the court and lack of law enforcement on copyright make physical piracy and on-line copyright piracy getting extremely increase.<sup>9</sup>

Major changes on digital right recognized in 1973, William and Wilkins, publisher of medical journals took legal action through the National Library of Medicine (NLM) and the National Institutes of Health (NIH).<sup>10</sup> NLM and NIH charged by making unauthorized photocopies of articles on plaintiff's medical journal and distributing them to medical researcher and physicians. The Court of Claims thought that medicine and medical research would be harmed if this were found to be infringement. In the result, Judge Davis stated:

"... Based on the type and context of use by NIH and NLM as shown by the record, that there has been no infringement, that the challenged use is "fair" in view of combination of all the factors involved in consideration of 'fair' or 'unfair' use enumerated in the opinion, that the record fails to show a significant damage to plaintiff but demonstrates injury to

medical and scientific research if photocopying of this kind is held unlawful, and that there is a need for congressional treatment of the problems of photocopying."<sup>11</sup>

The "Fair" use was a major part of the revision included in the Copyright Act of 1976. The revision of the Act codified for two main reasons; first is technological advance and their impact on what might be copyrighted, how works might be copied, and what constituted to be addressed. Second is anticipation of Berne Convention devotion by the United States.<sup>12</sup> This amendment organized for the first time concerning fair use and copyright extension of unpublished works. Additionally, one section was added that allowed library, photocopying without permission due to scholarship, preservation, and interlibrary loan under certain circumstances.<sup>13</sup> Whether the use of a work (including reproduction in copies or digital records or by any means categorized in that section,<sup>14</sup> the four following aspects to be considered; purpose and character of exploitation, nature of the copyrighted works, the amount of the content and substantiality of the percentage used in relation to the whole, and the effect of exploitation to the market.<sup>15</sup>

The Betamax case started when copyright owners of television programs<sup>16</sup> brought copyright infringement action against Sony Corporation America. The United States District Court of California<sup>17</sup> refused all claim sought by copyright owners and entered judgment for manufacturer, thus the respondent appealed. The United States Court of Appeals for the Ninth Circuit<sup>18</sup> overturned district court's verdict on copyright privilege, and manufacturer petitioned for *writ of certiorari*.<sup>19</sup> The Supreme Court of the United States<sup>20</sup> held that manufactures of VTR

confirm a significant and substantial number of copyright holders who licensed their programs for transmit on free television would not object to having their transmit time shifted by viewers and owners of copyrights on television programs failed to demonstrate that time shifting did not cause any likelihood of no minimal harm to the potential market for, or the value of, their copyrighted works and consequently, VTR was capable of substantial no infringing uses; thus, manufacturers' sale of such equipment to general public did not constitute contributory infringement of respondents' copyrights.<sup>21</sup>

Napster<sup>22</sup> and Aimster<sup>23</sup> cases were almost having same analysis from the copyright law point of view. The recording companies and music publisher sued them with brought contributory and vicarious infringement. They were Internet services that facilitated the transmission and retention of digital audio files by its user. Both of United States Court of Appeals affirmed the lower court judgment regarding the cases.

The Court of Appeals, Ninth Circuit for Napster litigation decided to affirm in part, reversed in part and remanded the District Court's Judgment, it held eight points in analyzing the cases: (1) plaintiffs established *prima facie* case of direct copyright infringement; (2) users' activities did not amount to fair use of the copyrighted works; (3) plaintiffs demonstrated likelihood of success on merits of contributory infringement claim; (4) plaintiffs demonstrated likelihood of success on merits of vicarious infringement claim; (5) Audio Home Recording Act was inapplicable; (6) plaintiffs raised sufficiently serious questions, and established that balance of hardships tipped in its favor, as to service's claim that it was entitled to "safe

harbor" under the Digital Millennium Copyright Act; (7) service did not establish defenses of waiver, implied license, or copyright misuse; (8) preliminary injunction was overbroad; (9) \$5 million bond amount was sufficient; and (10) service was not entitled to imposition of compulsory royalties rather than preliminary injunction.<sup>24</sup> The Court of Appeals, Seven Circuits for Aimster affirmed that Aimster, Inc., was a contributory and vicarious infringer. The Courts held that: (1) evidence supported finding that plaintiffs were likely to prevail on merits and (2) balance of harms favored granting of preliminary injunction.<sup>25</sup>

In addressing the comprehensive arguments from the cases above, the Courts found that both Internet companies facilitated users to transmit audio files (MP3) between and among its users. Commonly called "peer-to-peer" (P2P) file sharing, Napster and Aimster allowed its users to: (1) make MP3 music files stored on individual computer drives/devices available for copying by other Napster users; (2) search for MP3 music files stored on other users' computers; and (3) transfer exact copies of the contents of other users' MP3 files from one computer to another via the Internet. These processes were made possible by Napster's MusicShare software and Aimster's Software by registering on those systems and entering a password and user name. Those software were available free of charge from Napster's and Aimster's Internet sites. They provided technical support for the indexing and searching of MP3 files, as well as for its other functions, including a "chat room," where users can communicate directly each other and discuss information about their activities.<sup>26</sup>

On the Gonzales case, owners of copyright in musical brought infringement action against

Cecilia Gonzales of recordings through Internet file-sharing network. Cecilia Gonzalez was laid-off mother of five, who owed five major record companies \$22,500 for illegally downloading through the Internet. Gonzalez mainly downloaded songs she already owned on CD, her purpose were to help her avoid the labor of manually loading the 250 CDs she owned onto her device. In fact, the record companies are going after a continual customer. Gonzalez spent about \$30 per month on CDs. However, the RIAA claimed that it would not consider a settlement for less than \$3000, a huge amount for the Gonzalez family.<sup>27</sup> Gonzalez's argumentation has relied on the doctrine of "fair use" preserved in the U.S. Copyright Act and she defense that she was an "innocent infringer" upon the record companies' copyright.

The United States District Court for the Northern District of Illinois granted summary judgment for owners.<sup>28</sup> Gonzales' lawyer appealed the summary judgment in the Seventh Circuit Court of Appeals, hoping to get the case brought before a jury; fair use consideration failed to save Napster, Aimster, and MP3.com, and there were no precedents including individual. None of the downloading suited against individuals has yet gone to court so far more than 1,800 defendants have settled and paid up the compensation without a trial. Many haven't even bothered to hire lawyers.<sup>29</sup> The Court of Appeals held 4 consideration through this case; (1) downloading was not "fair use" of copy-righted material, (2) downloader did not qualify for "innocent infringer" reduction in amount of statutory damages, (3) downloader was not entitled to jury trial on question of amount of statutory damages; and (4) award of injunctive relief was not abuse of discretion.

Copyright infringement in Japan is not much

different with U.S. and Indonesia. There was infringement addressing to copyrighted works on the Internet. Started by "winny case" on November 2003, two Japanese used of "winny"<sup>30</sup> and arrested by the Kyoto Prefectural Police. They eventually found guilty of violating copyright law. However, winny case were not stop to the users, on May 10, 2004, the High-Tech Crime Taskforce arrested Isamu Kaneko, a 33 years old, an assistant professor at the University of Tokyo and the inventor of Winny Program.<sup>31</sup> He was suspected as a conspirator who commits copyright violations.<sup>32</sup> He was one of the first software programmers worldwide to fight such lawsuit. The Kyoto District Court held that P2P Programs were value-neutral and a legitimate, meaningful use, simply developing and publicly accessible does not essential qualify as supporting copyright infringement. However, promoting such technologies to the public, whether Kaneko did for research or intentionally offering the software. District court gave four considerations that Kaneko made Winny available on his website with knowledge and acceptance; (1) almost the files on exchanged on the Internet were copyrighted, (2) winny software program was generally used to infringe copyright, (3) winny was the save program for doing copyright violation, and (4) it used for many helpful and efficient features. Therefore, District Court stated that winny was a part to copyright infringement. Kaneko was guilty and were fined ¥1,5 million.<sup>33</sup>

On Appealed process, Osaka High Court overturned Kyoto District Court's decision, and decided Kaneko was not guilty. High Court held that winny program was a value-neutral technology with numerous applications. Winny made by Kaneko for general public, not

for specific individual. Kaneko did not unbearable who downloaded winny and how their performance and intention, whether good purpose or had intent to infringe the copyright. Programming winny was not solely for the sake of crimes, however, users individually in choosing their purpose. High courts' consideration on Kaneko's case got appreciation for other software programmer concerning to copyrighted works. It stated that even if a provider value neutral technology (software programs) and recognized the probability for public would use it for illegal purposes, it was prejudicial for the programmer/provider as an accessory to users' infringements. The provider or programmer was only carrying a punishment if they offering their program, advocating their usage for primarily illegal purposes. Finally, High Court held that the provider was free from the lawsuit.

October 21, 2009, Osaka High Public Prosecutor appealed to Japanese Supreme Court.<sup>34</sup> Supreme Court affirmed the Osaka High court of Japan by voted 4-1 to endorse the exoneration, and dissenting opinion from Justice Otani.<sup>35</sup> Based on the facts, Supreme Court was focus on the character of the program and the probability of winny's utilization by users. While, Kaneko known that an increasing number of users used Winny for copyright infringement, Kaneko could not be legally responsible as a subject of law. The truth was not enough to prove that Kaneko had intention to facilitate copyright violation, because he had already announced and released Winny as experiment to confirm whether Freenet P2P can be take place in practical application. Moreover, Kaneko posted important warning to the users, not to share/trade copyrighted files.

Countering the prosecutors' charge, the Supreme Court noted that even though Kaneko used Winny to download files that were probably copyrighted, his usage would not give rise to a claim that Kaneko knew the number of infringement taking place on the Winny network. He did such files downloading just to ensure that the software functioning smoothly. Thus, it would be mistaken to reversed the Osaka High Court's Judgments because he have not known that the misappropriation of Winny software had increased that he could be stated liable for its usage.<sup>36</sup> Therefore, the majority judges agreed that Kaneko did not have any required intent and he interested in establishing a P2P network than distributing of copyrighted files.<sup>37</sup>

On the contrary, Judge Otani stated that Kaneko was guilty. Otani was no doubt to the majority's legal framework, but emphasized that Kaneko would knew and recognized that more than a few people would use Winny for copyright violation. Otani agreed that Kaneko did not have intention for his program to be largely used for infringement, nor did he inspire the public to use Winny unlawfully. However, Otani highlight that Kaneko had continued to establish Winny without restraining the illegal copyrighted usage. Therefore, Kaneko must have had knowledge of copyright infringement.<sup>38</sup>

Based on survey and investigation of Illegal Trade Measures Council the General Association of Copyright for Computer Software on May 2014, file users sharing continued decrease from 2011.<sup>39</sup> There are five file-sharing software program that most used by public to illegal copyright activity; Winny, Share,<sup>40</sup> PerfectDark,<sup>41</sup> Gnutella and Bittorent. Practically, those P2P software program had great number

of files that exchange everyday. Winny was about 1.2 million units per day (2 million units in the January 2013 survey), Share was about 4.4 million units (59.000 units in the January 2013 survey), and PerfectDark was 24.000 units (34.000 units in the January 2013 survey). The Anti-Counterfeiting Association (ACA) and Consortium against Copyright Infringement via File-sharing (CCIF) cooperated with commercial fraud measures council from the NPA with 38 prefectural police nationwide was carried out simultaneous crackdown for copyright law violations such as; business software, file-sharing infringement through the internet (etc. movies, music, manga, anime and games) since February 2015. They searched 133 places and 40 people were arrested.<sup>42</sup>

Japanese Society for Rights of Authors, Composers and Publishers (JASRAC) with ACA, CCIF and other related organizations will continue that effective enforcement by working closely with related ministries and agencies of the National Police Agency. They active to send enlightenment mail to each group of ACA and CCIF members to carried out and participate by promoting to the public for not infringe the copyright, and intellectual property.<sup>43</sup> Additionally, on October 1<sup>st</sup>, 2012, copyright law amendment took place concerning criminal enforcement of illegal downloading.<sup>44</sup> Illegal downloading is also infringing a private use with the limitation. The provision penalizes person who intentionally/knowingly download illegally uploaded movie, music or copyrighted files. If we knew the contents are sold or getting paid-delivery online, and we still distributed illegally by downloading or uploading such things, we are subject to punishment.

Uploading illegal content into Internet had been illegal from before, the punishment was

maximum ten years in prison and/or a fine up to ten million yen. Since January 2010, downloading illegal contents online was illegal without punishment. Moreover on October 2012, even for personal use, downloading illegal contents with consideration: 1) we knew the contents are sold or getting paid-delivery online, 2) we distributed illegally by downloading or uploading the contents, we are subject of criminal with two years limit in prison and/or a fine up to two million yen.<sup>45</sup>

Indonesia's Internet technology is growing leisurely compared with European countries, America or Japan. In the late of 1993s, some as government offices and big corporations could perceive computer technology. This media was fairly exclusive, which unable to be practiced by ordinary people due to its expensive equipment used in assembling a media. Internet began to be utilized by the general public as a new communication media started in 1998.<sup>46</sup> It was characterized by the inclusion of computer education in the schoolhouse and the emergence of internet cafes (*warung internet*) in various region. Through internet cafes, the general public can use this media as a tool of communication. The 2005 statistics by the Asia Pacific Network Information Center showed that the number of Internet subscribers and users in Indonesia has Increased 11-fold and the number of Internet users has Increased more than 31-fold since 1998.<sup>47</sup> The Head of the Indonesian Internet Service Providers Association said that the number of Internet users in Indonesia is currently pegged at 25 million, an increase of which 5 million since 2006.<sup>48</sup>

Illegal digital sharing practices in Indonesia are almost the same with United States. While, in America, digital illegal sharing through

the Internet is highest than street piracy, Indonesia is opposite. From three big cities; Jakarta, Semarang and Yogyakarta and one developing province; Lampung, piratical activity still exist and become habit for junior, high, college students and workers in enjoying music, movie and computer software.<sup>49</sup> Retail pirate also offer to load illegal copyrighted files and application on numerous mobile device, hand phone or carriers. The physical market for most industries, including pirate movies in Blu-ray format, computer software and video games touch to 90 percent.<sup>50</sup> Though, millions of illegal music CDs (Compact Disc), DVD and MP3 are still manufactured and sold in the United States.<sup>51</sup> Street Piracy can be manufactured by Company CD as well as in an underground operation engaged in the large-scale burning of files to blank CD-R that is the sold in flea markets, on street corner, even in local retail stores. The copying and trafficking of pirated music and movie are increasingly sophisticated trade used by savvy multi-state criminal operations that distribute illegal product designed to resemble authentic CDs and replace legitimate sales.<sup>52</sup> Hence, there are seventy-nine cases noted by Japan Ministry of Justice between 2009–2011 regarding copyright infringement. This number is lower compare with another countries.<sup>53</sup>

Generally, pirate products can be produced and sold low-rated price than genuine products, but still bring pretty income for the infringer because they made usually with low-standard, no quality control, no authorization even safety and health guidance. There are to many factors that cause the piracy product transactions; culture, technology, regulation and its enforcement, economic, level of education and public policy. There are some steps of pirate do their action;

## 1. Data Retrieval

Collecting file is work to be done. It is obtained either through Internet or conventional ways by copying and burning onto CD. The perpetrators usually got electronic data, by downloading the files from unlicensed website. At least, there are more than 70 websites in Indonesia that offer pirated content or data freely. Through search engines, we can find the links locally or internationally, depend on data that we need.<sup>54</sup> Indirectly, the development of unlicensed websites that facilitate illegal downloading makes potential losses on the domestic music industry. The universal characteristics of websites that facilitate illegal downloading and illegal uploading are; there is no complete description of mentioned songs, only the song title and artist/band, no name music association or a recording company, the release of the album/song, and the album cover looks are not understood. The website does not try to get permission from the artist or the music company directly. Eventhough, they do not get direct revenue from electronic data distribution, but by the number of visitors to the website, they will get income by the number of supply, installation and advertisement at the site.

## 2. Announcements of New Creation (New Collection or Program)

Regarding to the issue of piracy publication of electronic data through the Internet, copyright law in the Indonesian defines announcement of the new creation as; recitation, propagation, exhibitions, sale and deployment of a creation by using any tools, including Internet media. Thus, an electronic data/creation can be read, heard or examine by others.<sup>55</sup> The placement of a creation without permission from the



creator or copyright holder into a website, is violating copyright. Such actions can be categorized as a form of creation announcements. Because by being placed in a website, everyone can access the content and will possibly gain economic benefit from such actions.

### 3. Data Multiplication

The perpetrators of piracy usually organize the data, such as songs, picture shows and software through search engines on the internet and collect them in a particular folder in a computer memory which will then be picked out according to their class. As with copyright infringement on the strain, the actors gather various songs according to type and then upload the collection of song types into a new folder in a web site, so the net user can simplify by choosing one type of music and found the large number of strains. The next step performed by the hijackers is inserting songs into the disc or known as MP3 (Moving Pictures Expert Group). The discs are having mass production both in domestic region and neighboring country such as Malaysia and Singapore, then illegally distributed in domestic and regional marketplaces. In Indonesia, many MP3s, movies and software are sold on the corners of the market, street without any permission from the record, movie and computer companies as official reseller.<sup>56</sup>

On October 16, 2014, Former President Yudhoyono signed Indonesia's new law regarding copyright replaced the prior of copyright law 2002. The new law brought some strength clauses to possibly implement immediate relief against digital form and infringement of cyber networking, in accordance with the TRIPS Agreement, Berne Convention, The WCT and

WPPT.<sup>57</sup> Hence, those provisions had serious concern, while other provisions need further policy in implementing the regulations. In some cases, needed changes were omitted. Concerning enforcement against copyright infringement on the Internet, articles 54 to 56 of the Law hold workable approach to addressing Internet-based infringements in Indonesia. Copyright holders believe, this combination of administrative and judicial assistance, when fully executed, will let the government to take effective action to stop online infringements. A new requirement in article 55 was inserted between the prior drafts and the final law, namely, that for any act involving an "entire" website, it shall be referred to a court for review within 14 days.

Nevertheless, under this law, criminal lawsuit are now complaint-based. Copyright holders analyze this as additional obstacles to establish effective enforcement; essentially, criminal cases should be prosecuted on an *ex officio* basis. Additionally, the criminal enforcement takes step backward from the previous law, in that they no longer provide minimum mandatory statutory criminal penalties. Without a minimum fine, right holder is concerned warning sentences will not be forthcoming. Specifically, some of the criminal penalties may be too weak to be avoided. Finally, Article 95 of the new Law creates "mediation" before a piracy case can be prosecuted. The purpose and operation of this provision in practice is still unclear to divide between civil or criminal penalties.

### III. Market Competition

Today, copyright industries face new growing problems with piracy using flash drivers,

smartphones, tablets and other high mobile technologies. In some countries, these devices are preloaded with illegal content even before they are sold.<sup>58</sup> U.S. copyright industries report growing problems about unauthorized retransmission of live sports, music and event telecast over the Internet among trading partners. Software sharing, such as games and computer program also exist over the Internet. Users can download the files and reduplicate into CD in large numbers and distribute to the market. This condition frequently happens in developing country. Instead, in U.S. and other developing countries, which had well Internet broadband, it can distribute by online. Japan as a developing countries and known as high technology country,<sup>59</sup> also addressing similar issue. The research from Ipsos and Oxford Economic on behalf of Japan and International Motion Picture Copyright Association (JIMCA) on 2011 has indicated the scale of loss caused by movie piracy to the Japanese economy. One on six of the Japanese adult population (aged 15–64) is active in some of movie piratical activity (downloading, streaming, buying counterfeit, borrowing unofficial and burning). Digital piracy is the most productive method of piracy with high levels of movie streaming and burning movies into CD at home. Latterly, digital piracy accounts for two third pirated volume in Japan.<sup>60</sup>

Indonesia is fourth populous country in the world<sup>61</sup> and consists of seventeen thousand more of islands. With the geographical and the population, Indonesia is one of the biggest markets of pirate product. In the meantime, retail and physical piracy continue largely persistent, Internet piracy; peer-to-peer downloading, streaming and direct download-upload at pirate content site is increasing.<sup>62</sup>

Estimates as a fourth Internet usage in Asia, with range between seventy-one million users<sup>63</sup> to one hundred-thirty nine million users,<sup>64</sup> Indonesian is now enjoying the broadband capability. More than half of Indonesian population has mobile phone access due to utilize the application, which is enabling to do infringe activity. These numbers indicate that enormous market of legitimate market for copyright goods. Unfortunately, lack of law enforcement cause online and mobile piracy proliferates and legitimates service cannot compete rigged with piracy.

Physical piracy remains a major problem in many markets around the world. Infringement on songs, movies and software occurred on illegal optical disc produce by unlicensed business and illegal market. In fact, the region with the highest rate of unlicensed Personal Computer (PC) installation was Asia Pacific, at 62 percent. It represented a two percentage-point increased from 2011.<sup>65</sup> Personally, the countries in the Asia Pacific made modest progress where Indonesia 84 percent of PC Software was installed without appropriate licensing in 2013, down two points from 86 percent in 2011.<sup>66</sup> Instead, Japan was the lowest country in the region with 19 percent in 2013, down two points from twenty-one percent in 2011.

Music, movie and software have been sold to consumers by recording or copying files in physical media such as Compact Disc (CDs), Digital Video Discs (DVDs) and cassettes. Historically, physical piracy or pirate product has strong connection with technology advanced. Copying machines, recording and multiplier machines create identical object with original copyrighted works. In America Copyright Act 1976, technological advancements and its

impact brought revision on major part of "fair" definition in all previous copyright law.<sup>67</sup>

Since 2000, USTR noted that physical piracy markets extremely increase in many developing countries. They devoted to special attention reducing unlicensed copies physical media.<sup>68</sup> Aggressive enforcement had not been done by Ukraine, Indonesia, Thailand, Russia, and the Philippines to address existing and prevent piratical activity.<sup>69</sup> Nowadays, even some countries have ratified the conventions into their national law, pirate product still can be found in some market. PT. Aquarius Musikindo as one of the biggest music companies in Indonesia surely felt the impact of the digital innovation and online infringement. They have to close two largest shop branches because of minus income from selling the original music. The availability of single and full track album of its artists easy downloaded via Internet has dropped the sales.<sup>70</sup> Indonesia for sure, from three big cities; Jakarta, Semarang and Yogyakarta and one developing province; Lampung, piratical activity still exist and become hobby for junior, high, college students and workers enjoying music, movie and computer software.<sup>71</sup> Retail pirate also offer to load illegal copyrighted files and application on numerous mobile device, hand phone or carriers. The physical market for most industries, including pirate movies in Blu-ray format, computer software and video games touch to 90 percent.<sup>72</sup> Street Piracy can be manufactured by Company CD as well as in an underground operation engaged in the large-scale burning of files to blank CD-R that is the sold in flea markets, on street corner, even in local retail stores. The copying and trafficking of pirated music and movie are increasingly sophisticated trade used by savvy multi-state criminal

operations that distribute illegal product designed to resemble authentic CDs and replace legitimate sales.<sup>73</sup> Hence, there are seventy-nine cases noted by Japan Ministry of Justice between 2009–2011 regarding copyright infringement. This number is lower compare with another countries.<sup>74</sup>

Generally, pirate products can be produced and sold low-rated price than genuine products, but still bring pretty income for the infringer because they made usually with low-standard, no quality control, no authorization even safety and health guidance. There are to many factors that cause the piracy product transactions; culture, technology, regulation and its enforcement, economic, level of education and public policy.

There are many types of piratical activity. Physical markets continuously decrease in some countries, while the number of copyright infringement on entertainment (music and movie) and software extremely increases on the Internet.<sup>75</sup> The expansion of digital communication and Internet had revolutionized the system of file distribution. All digital files can be shared all over the world with no decay, slow and secret by the Internet. Therefore, there were many controversy and significant treatment to protect the files from the pirate.

Downloading, uploading, and distributing the files over the Internet by peer-to-peer network (P2P) are common activity. P2P activity can be define as when two or more Personal Computers (PCs) are connected and share resources without going through a separate server computer. A P2P network can be an ad hoc connection a couple of computers connected via a Universal Serial Bus to transfer files. A P2P network also can be a permanent infrastructure that links half-dozen computers in a small office over copper wires. Or a P2P

network can be a network on a much grander scale in which special protocols and applications set up direct relationships among users over the Internet.<sup>76</sup> Commercial Internet Service Provider (ISP) sometimes is obvious third party, which contribute copyright infringement.<sup>77</sup> In this situation, P2P networks do not run single-handed, moreover, there are few profitable servers/websites involved; because a P2P network stores files on user's device. The theory of secondary liability used in previous file sharing cases may not apply to ISP when their service do not infringing the content.<sup>78</sup> Today, copyright industries face new growing problems with piracy using flash drivers, smartphones, tablets and other high mobile technologies. In some countries, these devices are preloaded with illegal content even before they are sold.<sup>79</sup> These numbers signify opportunities exist for the launch of legitimate services for the market of copyright materials in Indonesia. Unfortunately, with the absence of a sufficient legal or enforcement framework, online and mobile piracies have reproduced and legitimate/original services cannot enter this market compete with piracy. Notorious markets identified by IIPA members in the fall of 2014 and linked to Indonesia (either because they are located and extremely popular in Indonesia) include *gudanglagu.com*, *4shared*,<sup>80</sup> and *kickass.so*.<sup>81</sup> Other sites of concern include *subscene.com*<sup>82</sup> and *nontonmovies*<sup>83</sup> that were very popular in Singapore and Korea. The new laws try to provide create authority cooperate with Indonesian Government to order ISPs to disable access to websites on the basis of copyright infringement. This law should be quickly implemented.<sup>84</sup>

U.S. copyright industries report growing problems about unauthorized retransmission of live sports, music and event telecast over the

Internet among trading partners. Software sharing; such as games and computer program also exist over the Internet. Users can download the files and reduplicate into CD in large numbers and distribute to the market. This condition frequently happens in developing country. Instead, in U.S. and other developing countries, which had well Internet broadband, it can distribute by online. Japan as a developing countries and known as high technology country,<sup>85</sup> also addressing similar issue. The research from Ipsos and Oxford Economic on behalf of Japan and International Motion Picture Copyright Association (JIMCA) on 2011 has indicated the scale of loss caused by movie piracy to the Japanese economy. One on six of the Japanese adult population (aged 15–64) is active in some of movie piratical activity (downloading, streaming, buying counterfeit, borrowing unofficial and burning). Digital piracy is the most productive method of piracy with high levels of movie streaming and burning movies into CD at home. Latterly, digital piracy accounts for two third pirated volume in Japan.<sup>86</sup>

#### IV. Concluding Remarks

Most copyrighted works that can be reformed to digitize have big probability to duplicate illegally over the Internet and physical piracy. The condition has become critical for all kind of content industries, as their profit decline facing outspread content piracy. Therefore, specifically copyrighted industries need DRM to keep their business successively. Piracy cultures have become component of our daily life in the cyber society, sometimes even without or fully acknowledging legal or illegal. Some of Internet users lack of copyright

protection awareness. Users stop use for a while when a lawsuit took place, but after a while, start over the use of P2P. Discussions on digital web forums concern the risk of being caught, which indicates file sharing did by personal approach. Digital piracy is still concern on developed countries like Japan and US, while Indonesia as a developing country face both problems of physical piracy and digital copyright infringement. Public should not permit technology to outwit the law, moreover law must regulate to facilitate copyright owner and user to retain economic, moral and artistic control over their works. Government have guarantee to improve regulatory framework for strengthen copyright protection and enforcement on conventional or online market.

## [Notes]

- <sup>1</sup> Presented at Intellectual Property Meeting on June 26–27, 2015, Waseda University.
- <sup>2</sup> United States Trade Representative (USTR), 2014 Special 301 Report, at 45.
- <sup>3</sup> *Id.* At 20–21.
- <sup>4</sup> Yuko Noguchi, Digital Copyright in the US and Japan, 100, VDM (2009), at 71.
- <sup>5</sup> 17 U.S.C. § 107
- <sup>6</sup> Japanese Copyright Law, No.40, 1970, Amendment: Act No. 121, 2006, Art. 30.
- <sup>7</sup> Yuko Noguchi, *id.* at 71.
- <sup>8</sup> Japanese Copyright Law, *id.* Art 30 paragraph 2, *see also* Yuko Noguchi, at 77.
- <sup>9</sup> Indonesian Copyright Law No. 28, 2014, art 43–48.
- <sup>10</sup> Williams & Wilkins Co v. United States. 480 F. 2d 1345, (Court of Custom and Patent Appeal 1973).
- <sup>11</sup> *Id.*
- <sup>12</sup> The United States became a Berne Convention signatory in 1988, see Associations of Research Libraries, Washington D.C., *Copyright Timeline: A History of Copyright Law in the United States*, available at <http://www.arl.org/focus-areas/copyright-ip/2486-copyright-timeline#Top>, (last visited June 5, 2015).
- <sup>13</sup> *Id.* (section 108), *see also* (The National Commission on New Technological Uses of Copyrighted Works (CONTU) was agreed by Congress in 1976 to create guidelines for the "minimum standards of educational fair use" under the Copyright Act 1976. "The CONTU guidelines used to assist librarians and copyright proprietors in understanding the amount of photocopying for use in interlibrary loan arrangements permitted"), available at <http://old.cni.org/docs/infopols/CONTU.html> (last visited May. 21, 2015)
- <sup>14</sup> 17 U.S.C. § 107
- <sup>15</sup> *Id.*
- <sup>16</sup> Two respondents become representatives, Universal Studio. Inc. and Walt Disney Production.
- <sup>17</sup> Sony Corp v. Universal Studio. Inc., 480 F. Supp. 429.
- <sup>18</sup> Sony Corp v. Universal Studio. Inc., 659 F.2d 963.
- <sup>19</sup> Certiorari is a Latin word; it means "to be informed of, or to be made certain in regard to". It is also the name given to certain appellate proceedings for re-examination of actions of a trial court, or inferior appeals court. The U.S. Supreme Court still uses the term certiorari in the context of appeals. Petition for Writ of Certiorari, informally called "Cert Petition" is a document, which a losing party files with the Supreme Court asking the Supreme Court to review the decision of a lower court. It includes a list of the parties, a statement of the facts of the case, the legal questions presented for review, and arguments as to why the Court should grant the writ, available at <http://www.techlawjournal.com/glossary/legal/certiorari.htm>, (last visited, June 5, 2015).
- <sup>20</sup> Sony Corp v. Universal Studio. Inc., 464 U.S. 417, 104 S.Ct. 774.
- <sup>21</sup> *Id.*

- 22 A & M Records, Inc., v. Napster Inc., 239 F.3d 1004 (2001)
- 23 *In re: Aimster*, 334 F.3d 643 (2003)
- 24 Napster, *id.*
- 25 Aimster, *id.*
- 26 *Id.* at 646, *see also* Napster, *supra* note 22, at 1011.
- 27 Bob Mehr, *Gnat, Meet Canon*, February 3, 2005, *available at* <http://www.chicagoreader.com/chicago/gnat-meet-cannon/Content?oid=917905>, (last visited, May 31, 2015)
- 28 Gonzales v RIAA, 430 F.3d 888, 2005 WL 106592.
- 29 Bob Mehr, *id.* (Gonzalez's attorney saw the case as something bigger than a dispute over copyright law. A founding partner of the Oak Park firm Dowell Baker, which specializes in intellectual-property matters, he's working pro bono because he doesn't like the record companies' tactics. "In our view, Cecilia should have the right does have the right under the Seventh Amendment of the Constitution to have a jury decide whether or not she is an innocent infringer and to have a jury decide whether or not she should have to pay any damages whatsoever," he says. In issuing a summary judgment, "the judge took that right away from her")
- 30 Winny or WinNY is a Japanese peer-to-peer (P2P) file-sharing program. It was claimed as loosely inspired by the design principles behind the Freenet network, which makes user identities undetectable. While Freenet was implemented in Java, Winny was implemented as a Windows C++ application, *see* Jun Hongo, *File-Sharing: Handle Winny at Your Own Risk*, The Japan Times, October 27, 2009, *available at* <http://www.japantimes.co.jp/news/2009/10/27/reference/file-sharing-handle-wunny-at-your-own-risk/#.VXE4nIyeDGc>, (last visited Jun 5, 2015)
- 31 Takato Natsui, *Winny Case (a P2P Software Copyright Case in Japan-Impact on the Information Society and Legal Analysis)*, CILS (Center for International Legal Studies) Conference 2004, Sunshine Coast, Australia, (a paper, on file with author), *see also* John Leyden, *Japanese P2P founder arrested, Copyright rap for Winny P2P software author*, The Register, May 10, 2004, *available at* [http://www.theregister.co.uk/2004/05/10/winny\\_founder\\_arrested/](http://www.theregister.co.uk/2004/05/10/winny_founder_arrested/), (last visited Jun 5, 2015)
- 32 Mr. Kaneko was accused of supporting and assisting the infringement of copyrighted works. Penal Code of Japan, Art 62 & 63, and Japanese Copyright Law, Art. 23.
- 33 Ridwan Khan, *Pure Software in an Impure world?, WINNY, Japan's First P2P Case*, 8 University of Pennsylvania East Asia Law Review, 20, 24–25, 2013.
- 34 Hideki Mitsuyanagi, *Osaka High Public Prosecutor Appeals Winny Decision to the Court*, Internet Watch, October 21, 2009, *available at* [http://internet.watch.impress.co.jp/docs/news/20091021\\_323296.html?mode=pc;%20see%20also%20Press%20Release,%20Japan%20and%20International%20Motion%20Picture%20Copyright%20Association,%20Inc.,%20JIMCA%20Welcomes%20Appeal%20Against%20Acquittal%20Of%20Winny%20Developer%20\(Oct.%2022,%202009\),%20http://www.mpalibrary.org/assets/Japan\\_WinnyCase\\_Oct09.pdf%20\(welcoming%20the%20Osaka%20High%20Public%20Prosecutors%E2%80%99%20Office%E2%80%99s%20decision%20to%20appeal%20the%20acquittal\)](http://internet.watch.impress.co.jp/docs/news/20091021_323296.html?mode=pc;%20see%20also%20Press%20Release,%20Japan%20and%20International%20Motion%20Picture%20Copyright%20Association,%20Inc.,%20JIMCA%20Welcomes%20Appeal%20Against%20Acquittal%20Of%20Winny%20Developer%20(Oct.%2022,%202009),%20http://www.mpalibrary.org/assets/Japan_WinnyCase_Oct09.pdf%20(welcoming%20the%20Osaka%20High%20Public%20Prosecutors%E2%80%99%20Office%E2%80%99s%20decision%20to%20appeal%20the%20acquittal)), (last visited June 8, 2015)
- 35 5 Saikō Saibansho [Sup. Ct.] Dec. 19, 2011, 2009 (A) No. 1900, 65 SAIKŌ SAIBANSHO KEIJI HANREISHŪ [KEISHŪ]1.1, *available at* [http://www.courts.go.jp/app/files/hanrei\\_jp/846/081846\\_hanrei.pdf](http://www.courts.go.jp/app/files/hanrei_jp/846/081846_hanrei.pdf), (last visited June 8, 2015)
- 36 *Id.*, *see also* Ridwan Khan, *supra* note 33, at 28–29.
- 37 *Id.*
- 38 *Id.*
- 39 Association of Copyright for Computer Software (ACCS), *File Sharing Users Continued Decrease, Result of Crawling Survey of File-Sharing Software*, May 2014, (original text in Japanese), *available at* <http://www2.accs.jp.or.jp/research/reserch13.php>, (last visited, June 9, 2015)
- 40 <http://eng.share.benri-tool.net/>, (last visited, June

- 10, 2015)
- <sup>41</sup> <http://perfectdark.benri-tool.net/>, (last visited, June 10, 2015)
- <sup>42</sup> See <http://www.aca.gr.jp/>, (last visited, June 10, 2015)
- <sup>43</sup> CCIF gives guidance to delete the file and the software program, see <http://www.ccif-j.jp/activity.html>, (last visited, June 10, 2015)
- <sup>44</sup> <http://www.bunka.go.jp/seisaku/chosakuken/hokaisei/online.html>, (last visited, June 10, 2015)
- <sup>45</sup> Summary Q&A through copyright content on the internet by Agency for Cultural Affair; 1) Viewing or listening illegal contents like video or music is not illegal, unless you record the content, 2) viewing and caching made from video sharing sites like YouTube, are not illegal, 3) downloading online photos or copying and pasting text are not illegal as it is for private use, 4) it is illegal download even TV programs were broadcasted free and if we knew it was illegal distribution, moreover if the TV programs sold (either as online or disc), we are subject to punishment.  
[http://www.bunka.go.jp/seisaku/chosakuken/hokaisei/download\\_qa/index.html](http://www.bunka.go.jp/seisaku/chosakuken/hokaisei/download_qa/index.html), (last visited, June 10, 2015)
- <sup>46</sup> Jennifer Yang Hui, *The Internet in Indonesia: Development and Impact Radical Websites*, 33, 2, Journal of Conflict and Terrorism, (2010), at 173.
- <sup>47</sup> Asia Pacific Network Information Center, *The Internet in Indonesia*, Feb. 21, 2007,
- <sup>48</sup> *id.*, at 2.
- <sup>49</sup> Interview by some pirate sellers and users (Oct 2013), see also Pujiono & Dewi Suliastiningsih, *Latar Belakang Timbulnya Pembajakan Hak Cipta di Bidang Musik dalam Format Kaset dan Upaya Penanggulangannya di Kota Semarang* (The Background of Music Copyright Infringement on Optical Media Form and Its Enforcement in Semarang City), MMH, Vol. 3, Sept. 2008.
- <sup>50</sup> International Intellectual Property Alliance (IIPA), *Indonesia 2015; Special 301 Report on Copyright Protection and Enforcement*, Feb 6, 2015., at 37, see also Peggy Chaudry & Allan Zimmerman, *Protecting Your Intellectual Property Rights; Understanding the Role of Management, Governments, Consumers and Pirates*, 43, Springer, 2013
- <sup>51</sup> Stephen E. Siwek, *The True Cost of Sound Recording Piracy to the U.S. Economy*, Institute For Policy Innovation, Policy Report 188, Aug 2007, at 4.
- <sup>52</sup> *id.* At 4–5
- <sup>53</sup> The General Secretariat of Japan Supreme Court, *Sentencing of Imprisonment with work for financial and economic offenses in a court of first instance (2009–2011)*, Annual Report of Judicial Statistic, available at [http://hakusyo1.moj.go.jp/en/61/nfm/n\\_61\\_3\\_1\\_6\\_0\\_0.html](http://hakusyo1.moj.go.jp/en/61/nfm/n_61_3_1_6_0_0.html) (last visited Feb 14, 2015)
- <sup>54</sup> Hatta, *Pembajakan Musik: Lebih dari 70 Website Tawarkan konten Bajakan* (Music Pirate: More than 70 Websites offering Pirate Content), Rubrik Digital Economy, Aug. 5, 2012, available at <http://wartaekonomi.co.id/berita4470/pembajakan-musik-lebih-dari-70-website-tawarkan-konten-bajakan-ii.html> (last visited Feb 14, 2015).
- <sup>55</sup> Indonesian Copyright Act, No. 19, Art. 1, Sub 5, (2002)
- <sup>56</sup> International Intellectual Property Alliance (IIPA), 301 Special Report on Copyright Protection and Enforcement (2014), at 51–52.
- <sup>57</sup> Indonesia had joined the WIPO Copyright Treaty (WCT) on June 5, 1997 (in force March 6, 2002) and the WPPT on February 15, 2005.
- <sup>58</sup> USTR; The Special 301 Report (2014), *supra* note 2, at 21.
- <sup>59</sup> Based on the top tens website, available at <http://www.thetoptens.com/high-tech-countries/> (last visited June 5, 2015)
- <sup>60</sup> Japan and International Motion Picture Copyright Association (JIMCA), *Economic Consequences of Movie Piracy*, Japan Report, Jan 2011, at 3–4, see also Recording Industry Association of Japan (RIAJ), *Statistic Trends; The Recording Industry in Japan*, (2014).
- <sup>61</sup> Central Intelligence Agency (CIA), *The World Fact Book; Population*, July 2014, available at <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2119rank.html?countryname>

- =Indonesia&countrycode=id&regionCode=eas&rank=5#id (last visited Feb. 19, 2015)
- <sup>62</sup> International Intellectual Property Alliance (IIPA), *Copyright Industries in the US Economy, the 2014 Report* (2014), at 37–38.
- <sup>63</sup> Internet World Stats, <http://www.internetworldstats.com/stats3.htm> (last visited Feb. 19, 2015)
- <sup>64</sup> Indonesia Internet Service Provider Association (APJII), <http://www.apjii.or.id/v2/read/page/halaman-data/9/statistik.html> (last visited Feb. 19, 2015)
- <sup>65</sup> The Software Alliance (BSA), *The Compliance Gap, BSA Global Software Survey* (June 2014), at 9–10.
- <sup>66</sup> *id.*, at 8.
- <sup>67</sup> Association of Research Libraries, Washington D.C., *Copyright Timeline: A History of Copyright Law in the United States*, available at <http://www.arl.org/focus-areas/copyright-ip/2486-copyright-timeline#Top> (last visited Feb 12, 2015)
- <sup>68</sup> United States Trade Representatives (USTR), *The Special 301 Report* (2003), at 1.
- <sup>69</sup> *id.*, at 3.
- <sup>70</sup> <http://www.djarumcoklat.com/publicjournalism/kemajuan-teknologi-pembajakan-musik-amp-kebangkrutan-aquarius-musikindo>, see also <http://issuu.com/thebeatjakarta/docs/thebeatjak23/43>, (last visited June 12, 2015)
- <sup>71</sup> Interview by some pirate sellers and users (Oct 2013), see also Pujiono & Dewi Suliastiningsih, *Latar Belakang Timbulnya Pembajakan Hak Cipta di Bidang Musik dalam Format Kaset dan Upaya Penanggulangannya di Kota Semarang* (The Background of Music Copyright Infringement on Optical Media Form and Its Enforcement in Semarang City), MMH, Vol. 3, Sept. 2008.
- <sup>72</sup> International Intellectual Property Alliance (IIPA), *Indonesia 2015; Special 301 Report on Copyright Protection and Enforcement*, Feb 6, 2015, at 37, see also Peggy Chaudry & Allan Zimmerman, *Protecting Your Intellectual Property Rights; Understanding the Role of Management, Governments, Consumers and Pirates*, 43, Springer, 2013
- <sup>73</sup> *id.* At 4–5
- <sup>74</sup> The General Secretariat of Japan Supreme Court, *Sentencing of Imprisonment with work for financial and economic offenses in a court of first instance (2009–2011)*, Annual Report of Judicial Statistic, available at [http://hakusyo1.moj.go.jp/en/61/nfm/n\\_61\\_3\\_1\\_6\\_0\\_0.html](http://hakusyo1.moj.go.jp/en/61/nfm/n_61_3_1_6_0_0.html) (last visited Feb 14, 2015)
- <sup>75</sup> USTR; *The Special 301 Report* (2014), *supra* note 2, at 20–22.
- <sup>76</sup> James Cope, *Peer-to-Peer Network*, (Apr. 8, 2002), available at <http://www.computerworld.com/article/2588287/networking/peer-to-peer-network.html> (last visited Feb. 18, 2015)
- <sup>77</sup> See, e.g., *Playboy Enterprises, Inc. v. Frena*, 839 F. Supp. 1552 (M.D. Fla. 1993), *MGM Studios v. Grokster*, 545 U.S. 913 (2005), *BMG Music v. Gonzales*, 430 F. 3d 888 (2005), *RIAA v. Verizon*, 351 v. F.3d 1229 (D.C. Cir. 2003), *A&M Records v. Napster, Inc.*, 239 F.3d 1004 (2001) and *UMG Records v. MP3.com*, 92 F. Supp. 2d 349 (2000)
- <sup>78</sup> *RIAA v. Verizon*, 351 v. F.3d 1229 (D.C. Cir. 2003), see also Martha M. Chiske, *For Now, ISPs Must Stand and Deliver: An Analysis of in re Recording Industry Association of America v. Verizon Internet Services*, 8, Virginia Journal of Law and Technology Association, Sept 2003, at 8, see also Aditya Gupta, *The Scope of Online Service Provider's Liability for Copyright Infringing Third Party Content Under the Indians Law-The Road Ahead*, 15, Journal of Intellectual Property Right, (Jan 2010), at 35–45.
- <sup>79</sup> USTR; *The Special 301 Report* (2014), *supra* note 2, at 21.
- <sup>80</sup> *4shared.com* is a cyber locker often used to host downloadable infringing content (including major U.S. motion picture titles) for other dedicated piracy sites. They also have an unfiltered search function.
- <sup>81</sup> *Kickass.so* is a site designed for the purpose of commercially benefiting from piracy, and currently is the largest torrent site in the world.
- <sup>82</sup> *Subscene.com* is a subtitle file download site.



They host subtitle files of major motion pictures, but do not host the video files themselves.

<sup>83</sup> *Nontonmovie.com* is a user-generated content streaming site. The site has infringing content (including major U.S. motion picture titles) and can only be accessed in Indonesia.

<sup>84</sup> International Intellectual Property Alliance (IIPA), *supra* note 50, at 38.

<sup>85</sup> Based on the top tens website, *available at* <http://www.thetoptens.com/high-tech-countries/> (last visited Feb. 19, 2015)

<sup>86</sup> Japan and International Motion Picture Copyright Association (JIMCA), *Economic Consequences of Movie Piracy*, Japan Report, Jan 2011, at 3–4, *see also* Recording Industry Association of Japan (RIAJ), *Statistic Trends; The Recording Industry in Japan*, (2014).